

USSN 09/705,985

Docket No. 2874-US-CNT
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CENTRAL FAX CENTERAmendments to the Claims:

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The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-4. (canceled)

5. (currently amended) A method of inhibiting RANKL-induced osteoclastogenesis in a patient in need thereof, comprising administering to said patient a soluble RANK polypeptide composition comprising a soluble RANK polypeptide, wherein

said patient suffers from a condition selected from the group consisting of bone cancer, multiple myeloma, melanoma and breast cancer, ~~and further wherein~~

~~the soluble RANK polypeptide comprises amino acids 33-196 of SEQ ID NO:2 and is capable of binding to a RANKL polypeptide that consists of amino acids 1-317 of SEQ ID NO:8 and is selected from the group consisting of:~~

- (a) ~~a polypeptide comprising amino acids 33-196 of SEQ ID NO:2;~~
- (b) ~~a polypeptide that is at least 90% identical in amino acid sequence to a RANK polypeptide comprising amino acids 33-213 of SEQ ID NO:2; and~~
- (c) ~~a polypeptide comprising amino acids 33-213 of SEQ ID NO:2, and further wherein~~

said composition is administered in an amount sufficient to inhibit RANKL-induced osteoclastogenesis in said patient.

6-8. (canceled)

9. (previously presented) The method of claim 5, wherein the soluble RANK polypeptide further comprises a polypeptide selected from the group consisting of an immunoglobulin Fc domain, an immunoglobulin Fc mutein, a FLAGTM tag, a peptide comprising at least 6 His residues, a leucine zipper, and combinations thereof.

10. (canceled)

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11. (currently amended) The method of claim 95, wherein the soluble RANK polypeptide comprises an amino acid sequence that is at least 90% identical in amino acid sequence to amino acids 33-213 of SEQ ID NO:2.

12. (canceled)

13. (currently amended) A method of inhibiting RANKL-induced osteoclastogenesis in a patient in need thereof, said method comprising administering to said patient a composition comprising a recombinant soluble RANK polypeptide, wherein said patient suffers from a condition selected from the group consisting of squamous cell carcinoma, lung cancer, prostate cancer, hematologic cancer, head and neck cancer and renal cancer, and further wherein

the soluble RANK polypeptide comprises amino acids 33-196 of SEQ ID NO:2 and is capable of binding to a RANKL polypeptide that consists of amino acids 1-317 of SEQ ID NO:8 and is selected from the group consisting of:

- (a) a polypeptide comprising amino acids 33-196 of SEQ ID NO:2;
- (b) a polypeptide that is at least 90% identical in amino acid sequence to amino acids 33-213 of SEQ ID NO:2; and
- (c) a polypeptide comprising amino acids 33-213 of SEQ ID NO:2, and further wherein

said composition is administered in an amount sufficient to inhibit RANKL-induced osteoclastogenesis in said patient.

14. (canceled)

15. (currently amended) The method of claim 13, wherein the soluble RANK polypeptide comprises an amino acid sequence that is at least 90% identical in amino acid sequence to amino acids 33-213 of SEQ ID NO:2.

16. (previously presented) The method of claim 13, wherein the soluble RANK polypeptide further comprises one or more polypeptides selected from the group consisting of an immunoglobulin Fc domain, an immunoglobulin Fc mutein, a FLAG™ tag, a peptide comprising at least 6 His residues and a leucine zipper.

17. (canceled)

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18. (previously presented) A method according to claim 9, wherein the further polypeptide is selected from the group consisting of an immunoglobulin Fc domain comprising the amino acid sequence as shown in SEQ ID NO:3 and a leucine zipper comprising the amino acid sequence as shown in SEQ ID NO:6.

19. (canceled)

20. (previously presented) A method according to claim 16, wherein the further polypeptide is selected from the group consisting of an immunoglobulin Fc domain having the amino acid sequence as shown in SEQ ID NO:3 and a leucine zipper having the amino acid sequence as shown in SEQ ID NO:6.

21-24. (canceled)

25. (previously presented) A method according to claim 18, wherein the soluble RANK polypeptide consists of amino acids 30-213 of SEQ ID NO:2 fused with the amino acid sequence as shown in SEQ ID NO:3.

26. (previously presented) A method according to claim 20, wherein the soluble RANK polypeptide consists of amino acids 30-213 of SEQ ID NO:2 fused with the amino acid sequence as shown in SEQ ID NO:3.